REMARKS

Applicant has studied the Office Action dated July 2, 2010, and has made amendments to the claims. Claims 1-37 were previously canceled without prejudice. Claims 39, 41, 43 and 45 are now canceled without prejudice. Claims 38 and 42 have been amended. No new matter has been added. It is submitted that the application is in condition for allowance. Reconsideration is respectfully requested.

Rejections under 35 U.S.C. § 103

Claims 38-45 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0004924 to Kim et al. (hereinafter "Kim") in view of U.S. Patent Application Publication No. 2003/0060173 to Lee et al. (hereinafter "Lee"). This rejection is respectfully traversed.

As amended, independent claim 38 recites that each of at least two second data blocks and dummy bits are allocated to a plurality of antennas based on received channel status information, wherein the dummy bits are predefined between the apparatus and the receiving side, and wherein each of the at least two second data blocks is allocated to an antenna having good channel status and only the dummy bits are allocated to an antenna having bad channel status. Independent claim 42 recites similar features.

As admitted by the Examiner on pages 2-3 of the Office Action, Kim fails to teach certain features of claims 38 and 42. However, the Examiner cites the disclosure of Lee to cure the deficiencies of Kim. Applicant provides the following remarks.

Applicant recognizes that Lee discloses that transmission antennas at the two best transmission statuses transmit more significant data (e.g., systematic bits or control information bits) and the other transmission antennas transmit less significant data (e.g., parity bits). See page 3, paragraphs 0029 and 0034-0036, page 4, paragraph 0062, and pages 4-5, paragraph 0067 of Lee.

However, Applicant disagrees with the Examiner's assertion that Lee's disclosure of "parity bits" is analogous to the "dummy bits" of claims 38 and 42. In Lee, the parity bits are derived from transport blocks via channel encoding (see pages 5-6, paragraph

0083 of Lee). However, in the present invention, the dummy bits are not associated with data blocks (i.e., transport blocks). Further, as amended claims 38 and 42 recite, the dummy bits are predefined between the apparatus (transmitting side) and the receiving side as they are not related to the data blocks.

In contrast, the parity bits of Lee cannot be predefined between a transmitting side and a receiving side because the parity bits are outputted from a channel encoder according to an applied channel encoding scheme, wherein the channel encoder receives transport blocks as an input (pages 5-6, paragraph 0083 of Lee). Hence, the parity bits of Lee are not defined prior to channel encoding the transport blocks via the channel encoder. Therefore, Lee does not teach or suggest "dummy bits" which are predefined between the transmitting side and the receiving side.

In view of the forgoing, it is respectfully submitted that claims 38 and 42, and the claims respectively dependent thereon, are allowable over the combination of Kim and Lee.

Additionally, it is respectfully submitted that the cited references fail to teach the limitation "wherein the channel status information is a positive acknowledgement (ACK) or a negative acknowledgement (NACK) determined by the receiving side independently for each of the plurality of antennas through which each of the at least two second data blocks and the dummy bits has been transmitted" which was amended into claims 38 and 42. In other words, claims 38 and 42 provide that when the at least two data blocks and the dummy bits are transmitted via the plurality of antennas, the receiving side determines ACK or NACK independently for each of the plurality of antennas.

With regard to the rejection of claims 41 and 45, the Examiner asserts that page 2, paragraphs 0018-0020 and 0024 of Kim teach the above-mentioned feature of amended claims 38 and 42. However, it is respectfully submitted that page 2, paragraphs 0018-0020 and 0024 of Kim merely disclose general schemes of HARQ Type I, HARQ Type II, and HARQ Type III. However, nowhere in Kim does it teach or suggest a HARQ scheme using a plurality of antennas.

Accordingly, in further view of this reason, it is respectfully submitted that claims 38 and 42, and the claims respectively dependent thereon, are allowable over the combination of Kim and Lee.

CONCLUSION

In light of the above remarks, Applicant submits that the present Amendment places all claims of the present application in condition for allowance. Reconsideration of the application, as amended, is requested.

No amendment made was related to the statutory requirements of patentability unless expressly stated herein; and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicant has argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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